

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claims 1-17 (cancelled).

18. (New) A diagnostic circuit for a treble loudspeaker of a loudspeaker combination, the diagnostic circuit, comprising:

    a high frequency (HF) signal-generating device configured to output an HF voltage signal;

    at least one terminal for the loudspeaker combination;

    a measuring resistor that, upon connection of the loudspeaker combination to the terminal, forms therewith a voltage divider circuit; and

    a measurement device configured to measure a complex measured voltage drop in the voltage divider circuit and to ascertain a condition of the treble loudspeaker of the loudspeaker combination.

19. (New) The diagnostic circuit as recited in claim 18, wherein the measuring resistor is between the HF signal-generating device and the terminal, and the measurement device measure a measured voltage drop substantially at the loudspeaker combination.

20. (New) The diagnostic circuit as recited in claim 19, further comprising:

    a capacitor connected between the measuring resistor and the terminal.

21. (New) The diagnostic circuit as recited in claim 18, wherein the HF signal-generating device includes an HF signal source configured to output an HF input signal, and a downstream impedance converter that is configured to be switched on by a DC voltage diagnostic signal.

22. (New) The diagnostic circuit as recited in claim 21, wherein the impedance converter includes an emitter follower transistor that is configured to receive the HF input signal and the diagnostic signal.

23. (New) The diagnostic circuit as recited in claim 22, wherein a current source which includes a second transistor configured to be switched on by the diagnostic signal is an emitter resistor of the emitter follower transistor, a collector of the second transistor is connected to an emitter of the emitter follower transistor, an emitter of the second transistor is grounded through a resistor, and a base of the second transistor is configured to be activated by the diagnostic signal.

24. (New) The diagnostic circuit as recited in claim 23, wherein the base of the second transistor is configured to be activated by the HF input signal.

25. (New) The diagnostic circuit as recited in claim 18, wherein the measurement device is configured to ascertain a peak value of the measured voltage.

26. (New) The diagnostic circuit as recited in claim 24, wherein the measurement device includes a resistor connected to the terminal device, a capacitor connected to the resistor, and an evaluation device.

27. (New) The diagnostic circuit as recited in claim 18, wherein the measurement device includes a rectifier circuit configured to rectify the measured voltage and output a rectified measured voltage signal to an evaluation device.

28. (New) The diagnostic circuit as recited in claim 26, wherein the rectifier circuit includes a series circuit including a resistor, a capacitor, and a Schottky diode, the series circuit being grounded through a second capacitor.

29. (New) The diagnostic circuit as recited in claim 18, wherein the measurement device is configured to deduce a short circuit of the treble loudspeaker when a low measured voltage is ascertained, a correct condition of the treble loudspeaker from a moderate measured voltage, and an interruption at the treble loudspeaker from a high measured voltage.

30. (New) The diagnostic circuit as recited in claim 18, wherein the measuring resistor is a purely ohmic resistor.

31. (New) A method for testing a treble loudspeaker of a loudspeaker combination, comprising:

outputting a high frequency (HF) voltage signal to a voltage divider circuit made up of a measuring resistor and the loudspeaker combination;

measuring a complex measured voltage drop in the voltage divider; and

deducing a condition of the treble loudspeaker from the measured voltage.

32. (New) The method as recited in claim 31, wherein the measured voltage is measured as a voltage drop at the loudspeaker combination.

33. (New) The method as recited in claim 31, wherein a short circuit at the treble loudspeaker is deduced when a low measured voltage is ascertained at the loudspeaker combination, a correct condition of the treble loudspeaker is deduced when a moderate measured voltage is ascertained at the loudspeaker combination, and an interruption at the treble loudspeaker is deduced when a high measured voltage is ascertained at the loudspeaker combination.

34. (New) The method as recited in claim 30, wherein a peak value of the complex measured voltage is measured and subsequently evaluated.

35. (New) The method as recited in claim 31, wherein the complex measured voltage is rectified and subsequently evaluated.